

BEFORE THE OFFICE OF THE COMMISSIONER OF RAILROADS

STATE OF WISCONSIN

Petition of the Wisconsin Central Ltd. for a Determination of the Adequacy of Warning Devices at the Grade Crossing of the Its Tracks with CTH 'E' (Oak Street) in the City of Waupaca, Waupaca County

9164-RX-567

FINDINGS OF FACT AND ORDER

By letter dated May 14, 2004, the Wisconsin Central Ltd. (WCL) filed a petition with the Office of the Commissioner of Railroads (OCR) for a determination under §195.28, Stats., of the adequacy of warning devices at the grade crossing of its tracks with CTH 'E' (Oak Street) in the City of Waupaca, Waupaca County (Crossing No. 692 475B / MP 220.7X).

An OCR investigator inspected the crossings in August 2004. A diagnostic team including representatives from the OCR, Wisconsin Department of Transportation, the WCL, and the city of Waupaca inspected the crossing in October 2004. No hearing was held.

Findings of Fact

THE COMMISSIONER FINDS:

CTH 'E' (Oak Street) is about 40' wide in the vicinity of the crossing and intersects the railroad tracks at an angle of 75°. CTH 'E' (Oak Street) carried an average daily traffic (ADT) of 2020 according to 2002 DOT records at a legal speed limit of 25 mph.

The WCL operates 6 to 10 switch train movements per day over the crossing at a speed of 5 mph. The crossing consists of one industrial spur track.

A motorist traveling at 25 mph requires a safe stopping distance of 187'. The crossing is visible from more than 187' in each direction. Assuming a train speed of 5 mph, a motorist traveling at 25 mph needs to see a train when it is 100' from the crossing from a point 187' down the highway. The sight distance available in each quadrant from the safe stopping distance is inadequate. A railroad overpass is located immediately north of the spur track crossing. This structure blocks the view of southbound drivers. Buildings obstruct the view for northbound drivers.

The exposure factor at this crossing is about 12,000 to 20,000. The exposure factor equals the product of the number of trains per day and the number of highway vehicles per day, which yields a numerical value for the potential conflicts each day at the crossing.

Five train-vehicle accidents have occurred at this crossing since 1973. The accidents occurred in 1997, 2002, 2003 (2), and 2004.

The crossing is presently protected with reflective crossbucks. The existing warning devices are inadequate. The existing warning devices will be adequate until such time as the new warning devices are installed. In order to adequately protect public safety 12" LED automatic flashing lights with island circuits are needed because of the extremely limited views down the tracks and the exposure factor. Sidelights are also needed on the northwest mast for Redfield Street. In addition foundations and cabling for possible future gates should be installed. If it is determined later that gates are needed it will be much cheaper to add the gates if the foundations and cables are already in place.

The crossbuck on the north side of the crossing is in advance of the underpass and should be relocated to the standard position 12' to 15' from the centerline of the track.

Last, a 'stop ahead' is located on the north side of the bridge. This sign will obstruct the view of the relocated crossbucks and of the automatic flashing lights once they are installed and should be relocated by the County. The 'stop ahead' sign is for the intersection of Oak Street and Mill Street about 450' south of the crossing. According to the Manual on Uniform Traffic Control Devices (MUTCD) this sign should be located about 150' from the intersection (and thus south of the crossing).

Light emitting diodes (LED) are a relatively new application for crossing signals. The LED lamps replace the incandescent bulbs. LEDs have higher conspicuity, a wider cone of vision, and longer life than incandescent lights. LEDs are especially useful on east-west roadways where the rising and setting sun may make the signals difficult to see.

The Wisconsin Central Ltd. shall re-use the signals and masts from Tower Road in the City of Waupaca after the previously-ordered new automatic flashing lights and gates are installed at Tower Road. The railroad indicated it could provide a salvaged signal bungalow. The existing bungalow from Tower Road contains constant warning time circuitry and can be better used at another crossing with higher and variable train speeds.

Source of funding: The signal materials and installation shall be paid from DOT safety funds provided the City or County or both agree to pay a 10% local match.

Conclusion on the Issue

THE COMMISSIONER CONCLUDES:

That in order to adequately protect and promote public safety, it is necessary to install and maintain 12" LED automatic flashing lights at the crossing of the tracks of RR with CTH 'E' (Oak Street) in the City of Waupaca, Waupaca County.

Conclusion of Law

THE COMMISSIONER CONCLUDES:

That the jurisdiction of the Office of the Commissioner of Railroads under §195.28, Stats., extends to this matter. Accordingly, the Office enters an order consistent with the findings of fact.

Order

THE COMMISSIONER ORDERS:

1. That the **Wisconsin Central Ltd.** shall install and maintain 12" LED automatic flashing lights (including sidelights on the northwest mast for Redfield Street) with island circuits and other appropriate appurtenances in accordance with such plans as are filed with and approved by the Office of the Commissioner of Railroads at the crossing of its tracks with CTH 'E' (Oak Street) at-grade in the City of Waupaca, Waupaca County by **December 31, 2005** (Crossing No. 692 475B / MP 220.7X). In addition, the **Wisconsin Central Ltd.** shall install foundations and cabling for possible future gates.

2. That the **Wisconsin Central Ltd.** shall submit to the Office of the Commissioner of Railroads signal and circuit plans with the cost estimate of its proposed installation and upon completion of the signal project, a detailed statement of the actual cost to the Office and to the Wisconsin Department of Transportation.

3. That the signal installation work herein ordered shall not begin until the district office of the Wisconsin Department of Transportation informs the railroad that they may start such work and such start notice will not be issued until appropriate federal aid or other funding arrangements have been assured. The cost of the new project initiated before the start notice will not be reimbursed with public funds and shall be the responsibility of the railroad.

4. That to the extent feasible the **Wisconsin Central Ltd.** shall re-use the signals and masts from Tower Road in the City of Waupaca.

5. That the **Wisconsin Central Ltd.** shall relocate the crossbuck on the north side of the crossing to the standard location 12' to 15' from the centerline of the track by **November 30, 2004**.

6. That the **Waupaca County** shall relocate the 'stop ahead' sign located north of the crossing for the intersection of Oak Street and Mill Street to a location south of the crossing by **November 30, 2004**.

7. That the **Wisconsin Central Ltd.** shall bear no part of the cost of the crossing signals installation, except for any cost assessed to the railroad pursuant to §195.60, Stats., for the investigation of this matter by the Office. The railroad shall not pass on those assessment costs either directly or indirectly.

8. That if the petitioner, railroad or any interested party objects to this order and requests a hearing within 20 days of the date of this order in writing, the Office will hold a public hearing.

9. That jurisdiction is retained.

Dated at Madison, Wisconsin, _____.

By the Office of the Commissioner of Railroads.

Rodney W. Kreunen
Commissioner of Railroads

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